# WEST WARWICK WWTF

ith multiple upgrades since its initial construction in the 1930's. West Warwick wiped the slate clean in 1993 by constructing an entirely new treatment facility right next to the old one. The facility, staffed by 22 operators and mechanics, is located in the Natick section of West Warwick, just off Pontiac Ave. The facility has currently completed a number of state-of-the-art upgrades to improve their plant and pump station instrumentation systems and will soon begin construction to expand its treatment capacity and reduce nutrient loadings. The facility discharges into the Pawtuxet River.

#### **CURRENT AND FUTURE CONCERNS**

In 1989, West Warwick as well as Cranston and Warwick were issued permits that required reductions in ammonia, TSS and BOD to improve oxygen levels in the Pawtuxet River. As required by the existing consent decree, the Town has completed 50% design of the required facility modifications. The RIDEM has drafted the West



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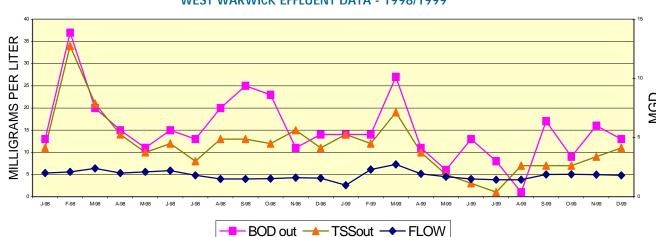
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# Overall Treatment: Fair

Having two monthly violations for flow (February and March 1998), one for TSS (September 1998, no monthly violations for BOD, or fecal coliform, and over 12 violations for Daily Maximum Limits for BOD and TSS, West Warwick received a rating of Fair.

Warwick permit and it will be Public Noticed and reissued in June 2000. The new permits include seasonal nitrogen limits, seasonal phosphorus limits, and year round ammonia limits. Once the permit has been issued, existing Consent Decrees will be modified to allow the city time to upgrade the facility to implement nutrient removal. The plans submitted by the City include the modifications necessary to achieve the proposed total nitrogen and phosphorus limits.

### WEST WARWICK EFFLUENT DATA - 1998/1999



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# BEGAN OPERATION 1930's

# **A**NNUAL **S**URVEY

Parameter	1996	1997	1998	1999	PERMIT LIMIT	VIOLATIONS 1998/1999
FLOW (MGD)	5.8	4.8	6.0	5.3	10.5	2/0
BOD INFLUENT (MG/L)	158.9	194.2	147.8	144.3		
BOD EFFLUENT (MG/L)	13.2	20.9	13.7	8.9	30	0/0
BOD INFLUENT (LBS./DAY)	7353.2	7228.3	6780.0	5883.0		
BOD EFFLUENT (LBS./DAY)	616.1	821.0	686.0	357.0		
BOD % REMOVAL	91.6	89.4	89.9	93.9		
TSS INFLUENT (MG/L)	114.9	132.4	120.6	134.8		
TSS EFFLUENT (MG/L)	12.0	10.7	13.7	8.5	30	1/0
TSS Influent (LBS./DAY)	5281.0	4949.0	5539.0	5507.0		
TSS EFFLUENT (LBS./DAY)	569.9	408.0	640.0	364.3		
TSS % REMOVAL	89.2	91.7	88.4	93.4		
FECAL COLIFORM (MPN/100ML)	32.7	8.1	9.9	3.2	200.0	0/0
CHLORINE RESIDUAL (MG/L)			1.0	0.9	2.0*	4/1

<sup>\*</sup>Daily Maximum Limit

WEST WARWICK 1986 -1999 DATA

## **Operations & Maintenance**

The town's new facilities experienced no major equipment problems. There was one (1) collection system bypass in 1999. The town began and completed the installation of a new state-of-the-art "SCADA" Control System. Odors from the facility, while greatly reduced from a number of years ago, have continued to be reported over the 2-year period.

1998 O&M Rating: 10 out of 10 1999 O&M Rating: 10 out of 10

1998 Laboratory Rating: 5 out of 5 (samples sent to private

lab)

1999 Laboratory Rating: 5 out of 5 (samples sent to private

Overall O&M Rating: Excellent

### 1998 SLUDGE DISPOSAL METHOD

Composting/Landfill Cover

**SLUDGE PRODUCED** 1,363 DRY TONS

#### 1999 SLUDGE DISPOSAL METHOD

Composting/Landfill Cover

# SLUDGE PRODUCED

1,619 DRY TONS

The town operates a sludge composting facility at the WWTF. The compost is used as cover material at the central landfill in Johnston, RI. The town has applied to DEM to distribute the compost to the public as a fertilizer product. That application is currently under review by DEM.

